SUBJECT:

210-Foot Antenna Coverage for Apollo 15 - Case 310

DATE: February 23, 1971

C. L. McGarry FROM:

MEMORANDUM FOR FILE

The coverage provided by the 210-foot antennas at Goldstone, Parkes, and Jodrell Bank has been determined for July through October launches to Hadley. The attached data cover a period of about five days for each month when the sun elevation ranges from 0° to about 56°. Touchdown points are noted for T+0 and T+24 missions where the sun elevation at landing is about 12° and 22°, respectively. T-24 missions land at the same time as T+O missions and hence PDI coverage is the same for T+0 and T-24 missions. Below is a table which shows the PDI coverage available for each case. touchdown times used are approximations and in some cases a slight variation in landing time will change the antenna coverage available.

Launch Date		Cover GDS	age By PKS JB
July 26, 1971	T+0	✓	
July 27, 1971	T+24	✓	
August 24, 1971	T+0		√
August 25, 1971	T+24		✓
September 22, 1971	T+0	✓	
September 23, 1971	T+24	✓	
October 22, 1971	T+0		✓
October 23, 1971	T+24		√

√ = Antenna coverage at touchdown.

2013-CLM-jab

Carol & Me Banny

C. L. McGarry

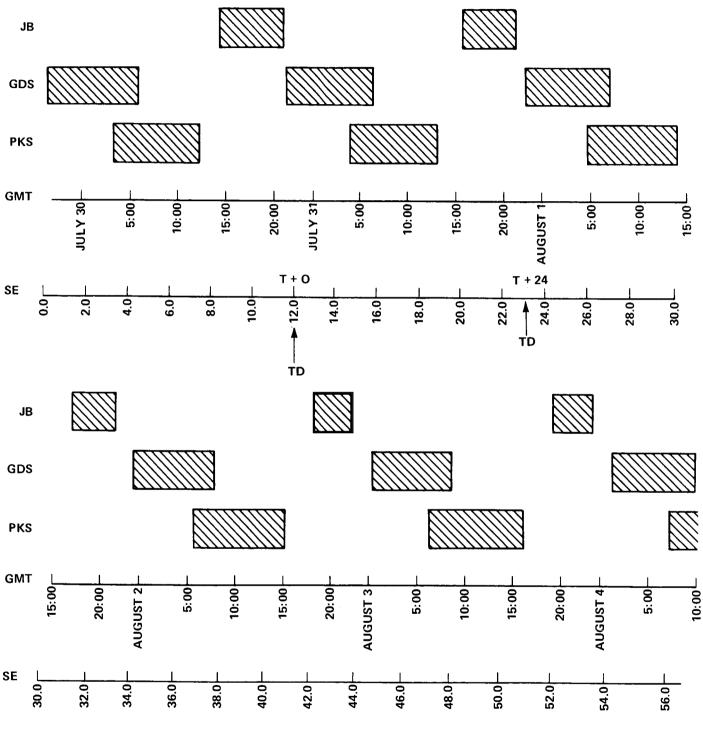
Attachment (NASA-CR-116937) A 210 FOOT ANTENNA COVERAGE FOR APCLLO 15 (Bellcomm, Inc.) 6 p

N79-72711

Unclas 00/32 12044

(CATEGORY)

JULY LAUNCH OPPORTUNITY TO HADLEY 210 FT. ANTENNA VISIBILITY



GDS = GOLDSTONE

JB = JODRELL BANK

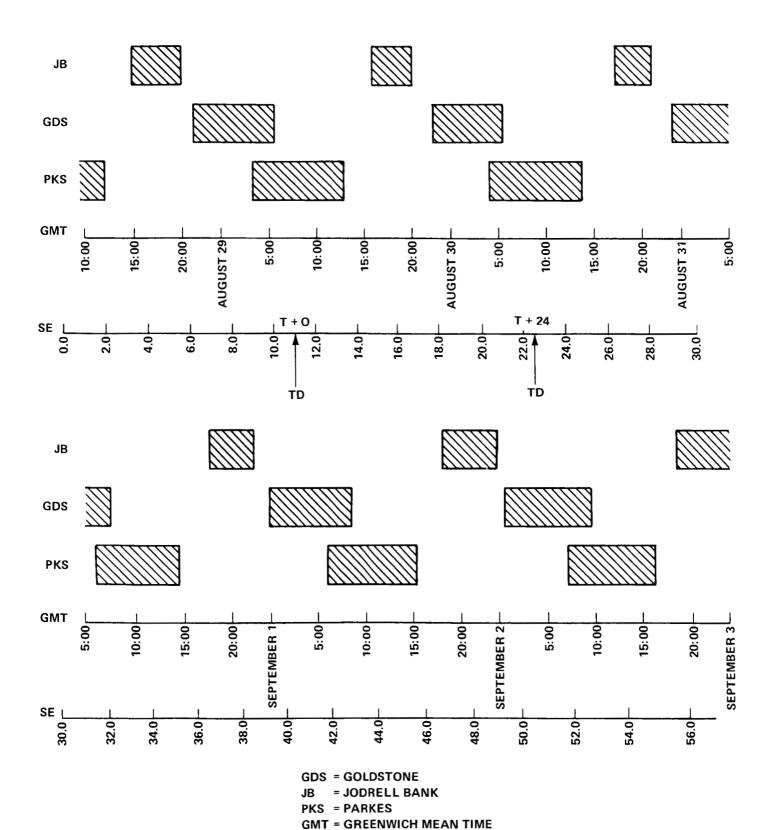
PKS = PARKES

GMT = GREENWICH MEAN TIME

SE = SUN ELEVATION

TD = TOUCHDOWN

AUGUST LAUNCH OPPORTUNITY TO HADLEY 210 FT. ANTENNA VISIBILITY



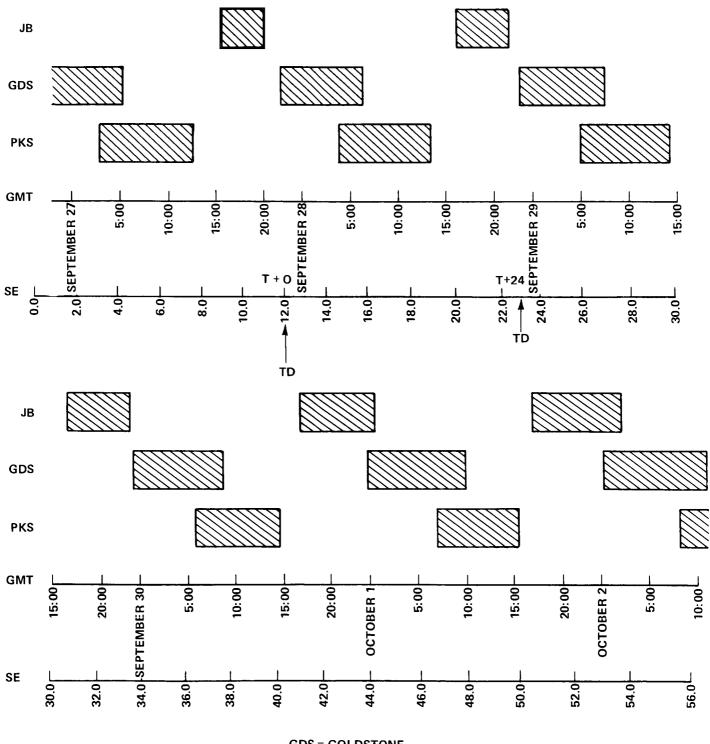
= SUN ELEVATION

= TOUCHDOWN

SE

TD

SEPTEMBER LAUNCH OPPORTUNITY TO HADLEY 210 FT ANTENNA VISIBILITY



GDS = GOLDSTONE

JB = JODRELL BANK

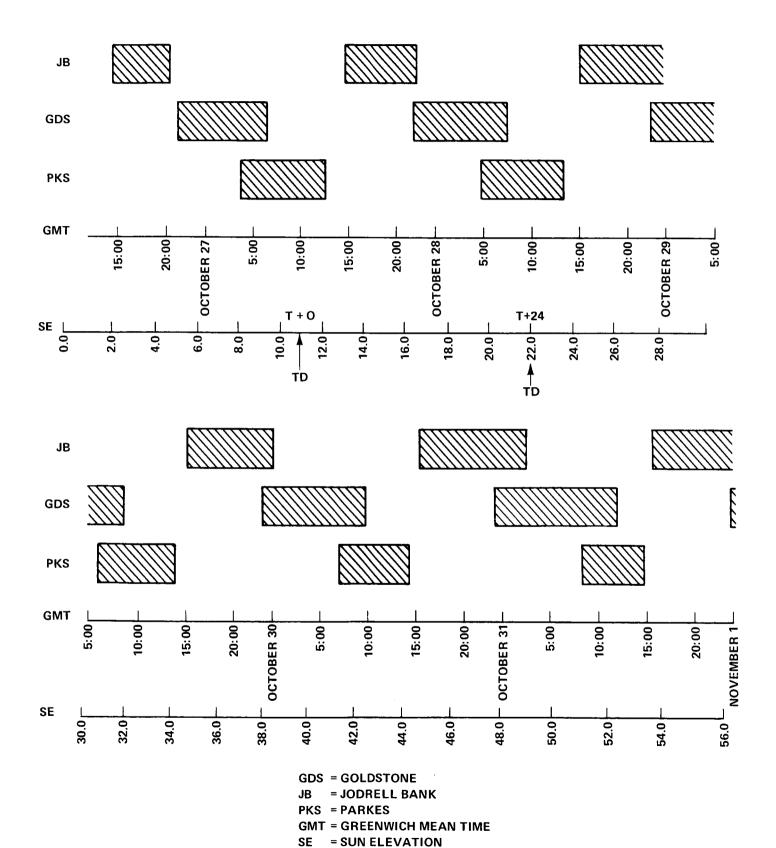
PKS = PARKES

GMT = GREENWICH MEAN TIME

= SUN ELEVATION

= TOUCHDOWN

OCTOBER LAUNCH OPPORTUNITY TO HADLEY 210 FT ANTENNA VISIBILITY



= TOUCHDOWN

BELLCOMM, INC.

Subject: 210-Foot Antenna Coverage

for Apollo 15 - Case 310

From: C. L. McGarry

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